

REMARKS

The Applicant respectfully requests further examination and reconsideration in view of the amendments above and the arguments set forth fully below. Claims 1-32 were previously pending in this application. Within the Office Action, claims 1-32 have been rejected. By the above amendment, Claims 1, 9, 17, 25, 31, and 32 are amended. Accordingly, claims 1-32 are currently pending.

Double Patenting

Within the Office Action, claims 1-32 have been provisionally rejected under 35 U.S.C. § 101 as claiming the same invention as that of claims 1-38 of co-pending Application No. 09/801,140. Each of the independent claims 1, 9, 17, 25, 31, and 32 of the present application have been amended to clarify that accessing one or more nodes within the directory tree structure and obtaining data from the one or more nodes is performed by an external system, where the external system is different than the electronic system that includes the directory tree structure.

Further, each of the independent claims 1, 9, 17, 25, 31, and 32 specify that the external system accesses the one or more nodes and obtains data from the one or more nodes using an applications programming interface (API). The API is described in the present specification as allowing other applications to use the research system of the present invention as a central infrastructure knowledge base. The API creates an interface between the application and the research system that allows a seamless connection to be made without users of the application noticing. The external systems use the API to periodically or randomly query the research system for information (Specification, page 33, line 9-21).

Independent claims 1, 11, 21, and 31 of Application No. 09/801,140 are directed to an apparatus for and a method of formatting a directory tree structure and to accessing nodes within the directory tree structure using a query string, wherein the query string defines a navigation path through the directory tree structure to access a specific node within the directory tree structure. Amended independent claims 1, 9, 17, 25, 31, and 32 of the present application are directed to an apparatus for and a method of formatting a directory tree structure within an electronic system, and to an external system different than the electronic system accessing one or more nodes within the directory tree structure and obtaining data from the one or more nodes by utilizing an applications programming interface (API). Therefore, the claims within the present application and the claims within the Application No. 09/801,140 are not directed to the same invention.

Within the Office Action, claims 1-32 have been provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-42 of co-pending Application No. 09/799,032. The Applicant is filing a terminal disclaimer herewith to obviate this double patenting rejection over Application No. 09/799,032.

Specification

Within the Office Action, the Applicant is requested to submit the status of all related applications referenced within the specification. The status of the referenced applications is pending. By the above amendments, the status, filing data and serial number of each referenced co-pending application is included within the specification.

Rejections under 35 U.S.C. §102(e)

Claims 1, 4, 8-9, 12, 16-17, 20, 24-25, and 28-32 have been rejected under 35 U.S.C. §102(e) as being anticipated by U.S. Patent No. 6,098,066 issued to Snow et al. (hereafter "Snow"). The Applicant respectfully traverses this rejection for the following reasons.

Snow teaches formatting a searchable database into a tree structure of directories. Each directory includes a document vector for each document within the directory. Each document vector is created by splitting the document into terms and associating a weight to each term based on the frequency with which the term is found in the document. In other words, each document is tagged with a list of terms, and their weights, found within the document. The tags are subsequently searched during keyword searches. Since most words in the document are tagged as "terms", the document vector does not effectively reduce the number of searchable keywords within the document. Snow then performs an adapted version of a keyword search. More specifically, Snow teaches categorizing documents, and then performing a keyword search by first specifying the category in which the keyword search is to be performed and then performing the keyword search within that category.

Further, Snow does not teach how a user subsequently searches the documents for specific values of predetermined parameters, for example using a parametric search. Snow teaches searching documents based on a keyword search of the indexed (tagged) terms. A keyword search is not the same as a parametric search. Snow is not designed to determine and tag documents according to their attribute-value pairs (parameter field names and their values), and to then search for documents according to specified values of predetermined parameters. Further, since Snow does not search for documents according to specified values of

predetermined parameters, Snow can not teach saving the values used in such a search, and then using these saved parameter values to determine if new documents added to the system match these saved parameter values, and if so, sending a notification signal to indicate so.

The present invention includes categorizing and parameterizing individual data items within a directory tree structure. Discrete data items can be located by defining a navigation path through the directory tree structure to a node associated with the discrete data item. Further, one or more parameters are associated with each discrete data item corresponding to a particular node. These one or more parameters are not keywords, or terms, as in Snow, but instead, each parameter defines a generic field (parameter field) to which a specific value corresponding to the discrete data item is associated. For example, at a "real estate" node, a parameter field name can be "number of rooms" or "price". The parameter field name is different than the actual value eventually associated with the parameter field name in relation to a specific data item. Continuing the example, homes for sale may be described in property fliers. A generic property flier can include many parameters used to describe the home for sale, where each parameter is identified by its parameter field name. The generic property flier can include parameters with parameter field names such as "number of bedrooms", "number of bathrooms", "square footage", "address", and "price". A particular data item associated with the real estate node can be a property flier for a specific home for sale. The parameter with parameter field name "number of bedrooms" has a value of "3", in this case, and so on for each of the parameters associated with the property flier. In this manner, it is clear that the value of each parameter, which is specific to a particular data item, is different than the parameter field name of each parameter, which generically defines the type of the parameter.

Snow teaches searching documents based on a keyword search. Snow does not teach determining and tagging documents according to their attribute-value pairs (parameter field names and their values), and to then search for documents within a directory tree structure according to specified values of the predetermined parameters. Further, since Snow does not teach performing a search according to specified values of the predetermined parameters, Snow can not teach saving the values used in such a search, and then using these saved parameter values to determine if new documents added to the system match these saved parameter values, and if so, sending a notification signal to indicate so.

Within the Office Action, it is stated that Snow teaches accessing the directory using an application programming interface. Specifically, Figure 2 of Snow is cited to support this assertion. The Applicant respectfully disagrees with this conclusion. Figure 2 of Snow is a flow

diagram of the main program loop utilized in creation of the class hierarchy. There is no hint, teaching, or suggestion within Figure 2 of Snow, or the detailed description of Figure 2, as to using an application programming interface (API) to access the class hierarchy. In fact, there is no mention of an API for any use within Snow.

Claim 1 is directed to a method of accessing data within an electronic system by a system external to the electronic system. The method comprises the steps of formatting a searchable database within the electronic system into a directory tree structure, wherein the directory tree structure includes nodes comprising related data and branches comprising links between the nodes, wherein each related item of data is categorized by a navigation path through the directory tree structure and by one or more set parameters, wherein the parameters are specific to the node in which the related data is included, and an external system different than the electronic system accessing one or more nodes within the directory tree structure and obtaining data from the one or more nodes by utilizing an applications programming interface (API). As discussed above, Snow does not teach searching for documents within a directory tree structure according to specified values of predetermined parameters. Further, Snow does not teach using an API to access and obtain data from the directory tree structure. For at least these reasons the independent claim 1 is allowable over the teachings of Snow.

Claims 4 and 8 depend on the independent claim 1. As described above, the independent claim 1 is allowable over the teachings of Snow. Accordingly, claims 4 and 8 are also allowable as being dependent on an allowable base claim.

Claim 9 is directed to a research system for providing access to a searchable database by a system external to the research system. The research system comprises means for formatting the searchable database into a directory tree structure, wherein the directory tree structure includes nodes comprising related data and branches comprising links between the nodes, wherein each related item of data is categorized by a navigation path through the directory tree structure and by one or more set parameters, wherein the parameters are specific to the node in which the related data is included, and means for an external system different than the electronic system accessing one or more nodes within the directory tree structure and obtaining data from the one or more nodes by utilizing an applications programming interface (API). As discussed above, Snow does not teach searching for documents within a directory tree structure according to specified values of predetermined parameters. Further, Snow does not teach using an API to access and obtain data from the directory tree structure. For at least these reasons the independent claim 9 is allowable over the teachings of Snow.

Claims 12 and 16 depend on the independent claim 9. As described above, the independent claim 9 is allowable over the teachings of Snow. Accordingly, claims 12 and 16 are also allowable as being dependent on an allowable base claim.

Claim 17 is directed to a research system for providing access to a searchable database by a system external to the research system. The research system comprises a research server configured to format the searchable database into a directory tree structure, wherein the directory tree structure includes nodes comprising related data and branches comprising links between the nodes, wherein each related item of data is categorized by a navigation path through the directory tree structure and by one or more set parameters, wherein the parameters are specific to the node in which the related data is included, and an external system different than the electronic system to access one or more nodes within the directory tree structure and to obtain data from the one or more nodes by utilizing an applications programming interface (API). As discussed above, Snow does not teach searching for documents within a directory tree structure according to specified values of predetermined parameters. Further, Snow does not teach using an API to access and obtain data from the directory tree structure. For at least these reasons the independent claim 17 is allowable over the teachings of Snow.

Claims 20 and 24 depend on the independent claim 17. As described above, the independent claim 17 is allowable over the teachings of Snow. Accordingly, claims 20 and 24 are also allowable as being dependent on an allowable base claim.

Claim 25 is directed to a network of devices for providing access to a searchable database by a system external to the research system. The network of devices comprises one or more computer systems configured to establish a connection with other systems, and a research server coupled to the one or more computer systems to format the searchable database into a directory tree structure, wherein the directory tree structure includes nodes comprising related data and branches comprising links between the nodes, wherein each related item of data is categorized by a navigation path through the directory tree structure and by one or more set parameters, wherein the parameters are specific to the node in which the related data is included, and an external system different than the electronic system to access one or more nodes within the directory tree structure and to obtain data from the one or more nodes by utilizing an applications programming interface (API). As discussed above, Snow does not teach searching for documents within a directory tree structure according to specified values of predetermined parameters. Further, Snow does not teach using an API to access and obtain data from the directory tree structure. For at least these reasons the independent claim 25 is allowable over the teachings of Snow.

Claims 28-30 depend on the independent claim 25. As described above, the independent claim 25 is allowable over the teachings of Snow. Accordingly, claims 28-30 are also allowable as being dependent on an allowable base claim.

Claim 31 is directed to a method of accessing data within an electronic system by a system external to the electronic system. The method comprises the steps of formatting a searchable database within the electronic system into a directory tree structure, wherein the directory tree structure includes nodes comprising related data and branches comprising links between the nodes, wherein each related item of data is categorized by a navigation path through the directory tree structure and by one or more set parameters, wherein the parameters are specific to the node in which the related data is included, and an external system different than the electronic system accessing one or more nodes within the directory tree structure and obtaining data from the one or more nodes by utilizing an applications programming interface (API), wherein the applications programming interface accesses the one or more nodes within the directory tree structure using a query string defining a navigation path through the directory tree structure to access a specific node within the directory tree structure. As discussed above, Snow does not teach searching for documents within a directory tree structure according to specified values of predetermined parameters. Further, Snow does not teach using an API to access and obtain data from the directory tree structure. For at least these reasons the independent claim 31 is allowable over the teachings of Snow.

Claim 32 is directed to a method of accessing data within an electronic system by a system external to the electronic system. The method comprises the steps of formatting a searchable database within the electronic system into a directory tree structure, wherein the directory tree structure includes nodes comprising related data and branches comprising links between the nodes, wherein each related item of data is categorized by a navigation path through the directory tree structure and by one or more set parameters, wherein the parameters are specific to the node in which the related data is included, and an external system different than the electronic system accessing one or more nodes within the directory tree structure and obtaining data from the one or more nodes by utilizing an applications programming interface (API), wherein accessing one or more nodes is performed utilizing a selective one or more search methodologies including keyword search, hierarchical search, dichotomous key search, and parametric search. As discussed above, Snow does not teach searching for documents within a directory tree structure according to specified values of predetermined parameters. Further,

Snow does not teach using an API to access and obtain data from the directory tree structure. For at least these reasons the independent claim 32 is allowable over the teachings of Snow.

Rejections under 35 U.S.C. §103(a)

Claims 2-3, 5-7, 10-11, 13-15, 18-19, 21-23, 26-27, and 29 have been rejected under 35 U.S.C. §103(a) as being unpatentable over Snow in view of U.S. Patent No. 6,292,796 issued to Drucker et al. (hereafter "Drucker"). The Applicant respectfully traverses this rejection.

Claims 2-3 and 5-7 are dependent on the independent claim 1. Claims 10-11 and 13-15 are dependent on the independent claim 9. Claims 18-19 and 21-23 are dependent on the independent claim 17. Claims 26-27 and 29 are dependent on the independent claim 25. As discussed above, the independent claims 1, 9, 17, and 25 are each allowable. Accordingly, claims 2-3, 5-7, 10-11, 13-15, 18-19, 21-23, 26-27, and 29 are also each allowable as being dependent on an allowable base claim.

For the reasons given above, Applicant respectfully submits that claims 1-32 are now in a condition for allowance, and allowance at an early date would be appreciated. Should the Examiner have any questions or comments, he/she is encouraged to call the undersigned attorney at (408) 530-9700.

Respectfully submitted,
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CERTIFICATE OF MAILING (37 CFR § 1.8(a))

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